



**The City of Kannapolis
Wastewater Collections System
Annual Report
Fiscal Year
July 2018 - June 2019**

Why Do We Publish This Report?

On July 21, 1999, North Carolina Governor James Hunt signed a law, House Bill 1160, requiring annual reports from municipalities that operate wastewater collection and treatment systems.

The annual reports inform system users of specific items such as the number of wastewater overflows, violations of permit conditions or environmental regulations. It also requires we report the impact of any such violations on the environment and corrective measures taken to minimize recurrences.

We have decided to inform you, the system user, not only of the required facts but of the stake each user has in this function and what you can do to help ensure its reliability.



The Treatment Process

The City of Kannapolis discharges its wastewater to the Water and Sewer Authority of Cabarrus County's (WSACC's) Rocky River Regional Wastewater Treatment Plant located in southern Cabarrus County.

The plant (NPDES Permit # NC0036269) has a treatment capacity of 26.5-million gallons per day (MGD) and uses a pure-oxygen activated sludge secondary treatment system that processes both domestic and industrial wastewater from both in-plant and off-site sources.

The solids processing operation relies on a combination of proven and cost effective technology available for the solids handling process.

The Wastewater Collection System

The City of Kannapolis' Wastewater Collection System was installed from the mid-1900's to the present. The system consists of approximately 326 miles of sewer pipelines and fourteen wastewater lift stations. The City of Kannapolis Public Works Department performs the operation and maintenance of the collection system that serves approximately 19,000 customers.

During our reporting year, our crews provided maintenance service to the system and its customers with professionalism and efficiency:

One Jet-Vactor crew cleans the City's sewer system to limit the number of wastewater back-ups and overflows. A wastewater response crew responds to all calls related to potential blockages, customer back-ups and overflows within the collection system.



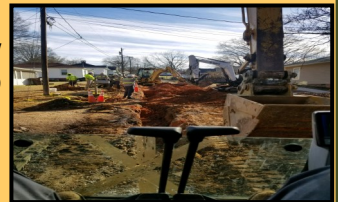
The Closed-Circuit TV Inspection crew uses a wheel driven camera that videotapes the interior of wastewater pipes to identify defects, obstructions, check effectiveness of the jet-vactor cleaning operations and inspect all new collection system extensions before the City accepts them for operation and maintenance.



The Pump Station crew maintains the City's fourteen wastewater lift stations. The crew performed 728 routine inspections and responded to 85 alarms at the lift stations this year. The Outfall Crew clears the wastewater collections system's outfalls within rights-of-way and performs semi-annual inspections of the system.



The City also has three Construction and Maintenance crews that install new service connections, performs minor system expansions and provides repairs to existing wastewater infrastructure.



Contract services are utilized for the installation of any major wastewater collection system expansions, the replacement of aging, deteriorating infrastructure and some outfall mowing.

The City of Kannapolis' Engineering Staff assists collection crews by providing additional technical support to operations and periodic updates to system maps and construction drawings.

The City of Kannapolis has several construction projects underway to further enhance the level of service and quality of life to our citizens. In addition, we continually perform proactive maintenance to the collection system to prevent wastewater overflows.

The following maintenance was completed:

| | |
|---|---------|
| Manholes raised & upgraded: | 35 |
| Repairs to laterals: | 14 |
| Sewer main repairs: | 2 |
| Lateral blockages, unblocked & rodded: | 673 |
| Closed-circuit camera inspection (linear feet): | 376,772 |
| Cleanouts installed: | 2 |
| Sewer mains cleaned (linear feet): | 196,569 |
| Cleanout caps installed | 48 |



Collection System Overflows

The City of Kannapolis investigated approximately 618 possible municipal and private wastewater related back-ups and overflows during the fiscal year. The twelve incidents listed below resulted in a spill or overflow of wastewater to the surface waters and were reported to the State. All locations were hydraulically cleaned up and down stream, debris was removed (if any) and were video inspected. The affected areas were flushed with fresh water, treated with lime, seeded and straw was spread.

Incidents that were reported to the State:

August 30, 2018 at 647 Spencer Lane, West A Outfall +/- 2,400 gallons due to blockage caused by rags and other debris

September 16, 2018 at 800 East 13th Street +/- 3,000 gallons due to severe natural conditions from Hurricane Florence

September 16, 2018 at 199 Oakdale Street +/- 13,500 gallons due to severe natural conditions from Hurricane Florence

September 19, 2018 at 303 Vance Street +/- 500 gallons due to debris in line from metal pieces causing blockage

October 11, 2018 at 5555 Charlie Walker Road +/- 18,000 gallons due to severe natural conditions from Hurricane Michael

October 18, 2018 at 1209 Mason Street +/- 225 gallons due to blockage from busted sewer hose ball in line

December 31, 2018 at 521 East 20th Street +/- 1,200 gallons due to grease blockage

March 8, 2019 at 555 East 18th Street +/- 90 gallons due to blockage from rags, sticks, and grease

March 8, 2019 at 412 East 22nd Street +/- 2,400 gallons due to pipe failure breakage

April 20, 2019 at 621 Rogers Lake Road +/- 270 gallons due to grease blockage

June 5, 2019 at 1008 Alabama Street +/- 30 gallons due to debris in line from shop towels, rags, and other personal hygiene debris

June 24, 2019 at 2326 Red Birch Way +/- 15 gallons due to debris in line from sewer hose ball plug blockage

TO PREVENT WASTEWATER OVERFLOWS

NEVER

- **Never** put oils, liquid or solid greases, fatty meat, or other food scraps down a drain - even if you use a motorized garbage disposal.
- **Never** put down a drain feminine products, cotton swabs, matchsticks, convenience wipes such as baby, hygienic, cleaning and disinfectant, as well as toilet bowl scrubbers and paper towels even if labeled as "disposable or flushable".
- **Never** use hot water to melt grease so it will go down the drain easier.
- **Never** flush any of the items listed above down a toilet.

ALWAYS

- **Always** keep grease out of wash water by wiping dishes with a disposable towel before washing.
- **Always** remove solidified grease from kitchen utensils, equipment, wares and food preparation areas with scrapers or paper towels. Dispose of scrapings and towels in trash cans.
- **Always** allow hot liquid grease to solidify and then dispose of properly.
- **Always** place all food scraps in trash collection containers.
- **Always** recycle restaurant grease by using contract rendering services and have grease traps cleaned and serviced frequently.

REPORT

- **Report** trucks discharging liquids or other substances into open municipal sewer manholes.
- **Report** acts of vandalism on manholes, sewer lines, lift stations, hydrants and other structures.
- **Report** illegal dumping of toxic, corrosive, or flammable substances into manholes, drains, or toilets.
- **Report such incidents to:**

Public Works (704) 920-4200

PUBLISHED BY:

**The City of Kannapolis
Public Works Department
1401 Bethpage Road
Kannapolis, NC 28081**

**Phone: (704) 920-4200
Fax: (704) 920-4244**

**Wilmer Melton, III
Director of Public Works**

**Copies of this report are available at
the following locations:**

**Public Works Operations Center
1401 Bethpage Road
Kannapolis, NC 28081**

**Customer Service Center
Kannapolis City Hall
401 Laureate Way
Kannapolis, NC 28081**

**This report may also be viewed on
the City's website at:**

www.kannapolisnc.gov



CERTIFICATION

I certify under penalty of law that this report is complete and accurate to the best of my knowledge. I further certify that this report has been made available to the users or customers of the named system and that those users have been notified of its availability.

Wilmer Melton, III

Wilmer Melton, III - Director of Public Works

Date: August 15, 2019